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(54) **PROTEINS WITH REPETITIVE BACTERIAL-IG-LIKE (BIG) DOMAINS PRESENT IN *LEPTOSPIRA* SPECIES**

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CPC **C07K 14/20** (2013.01)
(58) **Field of Classification Search**
None
See application file for complete search history.

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(57) **ABSTRACT**

The invention relates to three isolated DNA molecules that encode for proteins, BigL1, BigL2 and BigL3, in the *Leptospira* sp bacterium which have repetitive Bacterial-Ig-like (Big) domains and their use in diagnostic, therapeutic and vaccine applications. According to the present invention, the isolated molecules encoding for BigL1, BigL2 and BigL3 proteins are used for the diagnosis and prevention of infection with *Leptospira* species that are capable of producing disease in humans and other mammals, including those of veterinary importance.

11 Claims, 13 Drawing Sheets